

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/053794 A1

(51) International Patent Classification⁷: **A61N 5/10**,
A61B 6/00, G21K 5/10

(21) International Application Number:
PCT/SE2004/001770

(22) International Filing Date:
29 November 2004 (29.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/526080 2 December 2003 (02.12.2003) US

(71) Applicant (for all designated States except US): **RADI-
NOVA AB** [SE/SE]; Långbackavägen 22, S-182 33 Dan-
deryd (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BRAHME, Anders**
[SE/SE]; Långbackavägen 22, S-182 33 Danderyd (SE).

(74) Agent: **AROS PATENT AB**; P.O. Box 1544, S-751 43
Uppsala (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

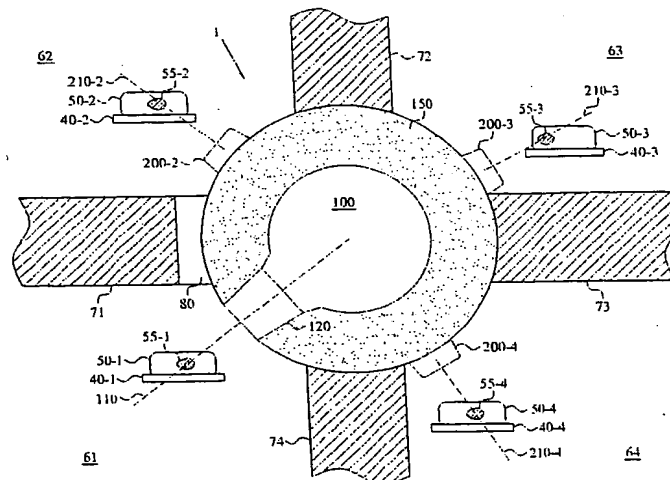
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **MULTIPLE ROOM RADIATION TREATMENT SYSTEM**



(57) Abstract: The present invention refers to a radiation system (1) comprising an excentric gantry (100) arranged in connection with multiple treatment rooms (61-68) separated by radiation-shielding separating members (71-78). A movable rotation head (120) is connected to the gantry (100) and is able to move between, and direct a radiation beam (110) into, the treatment rooms (61-68). A simulator head (200-1 to 200-8) is preferably arranged together with the radiation system so it can be used in each respective treatment room (61-68). In such a case, while a first subject (40-1) is being irradiated in a first room (61), a treatment set-up procedure, including correct positioning of subjects (40-2 to 40-8) and irradiation simulation, can simultaneously take place for the other subjects (40-2 to 40-8) in the other treatment rooms (62 to 68).

WO 2005/053794 A1

ABSTRACT

The present invention refers to a radiation system (1) comprising an excentric gantry (100) arranged in connection with multiple treatment rooms (61-68) separated by radiation-shielding separating members (71-78). A movable rotation head (120) is connected to the gantry (100) and is able to move between, and direct a radiation beam (110) into, the treatment rooms (61-68). A simulator head (200-1 to 200-8) is preferably arranged together with the radiation system so it can be used in each respective treatment room (61-68). In such a case, while a first subject (40-1) is being irradiated in a first room (61), a treatment set-up procedure, including correct positioning of subjects (40-2 to 40-8) and irradiation simulation, can simultaneously take place for the other subjects (40-2 to 40-8) in the other treatment rooms (62 to 68).